

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-14 and 16-23 are presently active in this case, no amendments to the claims are made herein.

In the outstanding Office Action, Claims 1-8, 11, 12 and 13 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,847,014 to Benjamin et al.; Claims 1-13 and 21 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,753,272 to Lee et al.; Claims 1-8, 11, and 12 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,664,738 to Arai et al.; Claims 9 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Benjamin et al. or Arrai et al. in view of Lee et al.; Claim 22 was rejected under 35 U.S.C. §103(a) as being unpatentable over Benjamin et al., Lee et al., or Arai et al.; Claim 23 was rejected under 35 U.S.C. §103(a) as being unpatentable over Arai et al. in view of the Answers.com reference; Claims 13, 14, 16-18 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Benjamin et al. or Arai et al. in view of Strang et al.; Claims 16, 17 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Benjamin et al.

Applicants traverse the rejections of the outstanding Office Action, without amendment, for the reasons stated below. In this regard, Applicants note that the outstanding Office Action does not address several arguments presented in the September 12, 2006 Amendment and applies prior art to claims previously presented without consideration of new claim language presented in the September 12, 2006 Amendment. Further, the outstanding Office Action continues to apply the cited reference to Strang et al. as prior art despite the fact that Applicants' May 19, 2006 Amendment and September 12, 2006 Amendment included a statement to remove this reference as prior art under 35 U.S.C. §103(c).

Therefore, there is no valid rejection of the claims to which Strang et al. is applied in the outstanding Office Action. At least for these reasons, Applicants submit that the outstanding Office Action is not complete under 37 C.F.R. §1.104 and *any future Office Action cannot be made Final.*

Turning now to the merits, Applicants' invention is directed to a substrate holder assembly that allows a conventional substrate holder to be configured as a thermally zoned substrate holder assembly in a simple and inexpensive manner.<sup>1</sup> Specifically, Applicants' independent Claim 1 recites a thermally zoned substrate holder having a base upper portion having top and bottom surfaces the top surface configured to support a substrate and the bottom surface having a recess formed therein. A plurality of temperature control elements are provided inside the recess each element having a top surface seated in the recess and a bottom surface forming a floor of the recess. Also recited is at least one thermal insulator having a lower coefficient of thermal conductivity than a material of the base, the at least one insulator being positioned within the recess and disposed between the plurality of temperature control elements and substantially thermally separating the plurality of temperature control elements. Finally, a base lower portion is positioned within the recess and seated to the floor of the recess to substantially fill the recess. An example of this configuration is best shown in Figure 7C of Applicants' specification, wherein the base upper portion is shown having a recess with the plural temperature control elements (in the embodiment of Figure 7C the temperature control elements include fins) provided within the recess and the respective temperature control elements separated by a thermal insulator. A base lower portion 40b and 42b is provided to complete the assembly.

As discussed in the Amendment filed September 5, 2006, the cited reference to Benjamin et al. discloses a multi-layer substrate holder having a support, but does not

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<sup>1</sup> Applicants' specification at paragraph [0007], lines 49-53.

disclose that the support or any other portion of the substrate holder has an upper portion with a recess in which a plurality of temperature control elements separated by a thermal insulator are placed, and in which a lower portion is placed to substantially fill the recess. The outstanding Office Action does not address this argument directly, but rather points to Figure 5 of Benjamin et al. as generally meeting the limitations of Claim 1. Figure 5 of Benjamin et al. discloses a substrate holder having a temperature controlled base 502 of bulk material, having a thermal insulating layer 504 provided thereon. The temperature control base 502 also includes thermal breaks 510 which isolate different regions of the temperature control base 502. In applying this figure to Claim 1 the outstanding Office Action states

Benjamin et al. (US 6,847,014) teaches an apparatus for controlling the temperature of a workpiece using a lateral thermal break, see Fig. 5. The thermally zoned substrate holder/base 502 comprises an upper portion with a top surface (flat support 506) and a lower portion positioned within the recess and seated to the floor of the recess to fill the recess. The bottom surface of the holder has a recess formed therein wherein a plurality of temperature control elements are present see T1 and T2. Thermal insulators 510 are provided within the recess and disposed between the temperature control elements T1 and T2.

Thus, the outstanding Office Action appears to apply the flat support 506 in Benjamin et al. as meeting the base upper portion feature of Applicants' Claim 1. However, Applicants' Claim 1 requires that the base upper portion have a recess formed therein. As seen in Figure 5 of Benjamin et al. the flat support 506 does not include a recess in a lower portion thereof. The above-quoted portion of the Office Action simply concludes that a recess is present in Figure 5 without providing any explanation for this position. Further, the above-quoted portion of the Office Action does not make clear how the portions T1 and T2 of the temperature controlled base can be considered to be within the recess. Finally, where is the base lower portion in Figure 5 of Benjamin et al.? If the thermal breaks 510 are to be considered the thermal insulator in Claim 1, then there cannot be a base lower portion

positioned within the recess and seated to the floor of the recess to substantially fill the recess. In short, Applicants respectfully submit that Figure 5 of Benjamin et al. is completely different from the structure of Applicants' Claim 1, and the outstanding Office Action provides no coherent explanation for how the features of Figure 5 can meet the limitations of Claim 1. Therefore, Applicants' Claim 1 is not anticipated by Benjamin et al.

The outstanding Office Action also cites Lee et al. as anticipating Claim 1. However, the Office Action applies Lee et al. to the claims as they were originally filed. In fact, paragraph 5 of the outstanding Office Action is substantially identical to paragraph 3 of the September 1, 2005 Office Action. Therefore, the Office Action does not address any of the claim language added to Claim 1 in the September 5, 2006 Amendment. This is improper and the rejection should be withdrawn. Moreover, Applicants submit that the cited reference to Lee et al. does not disclose the detailed structural features now recited in pending Claim 1.

The outstanding Office Action also cites Arai et al. as anticipating Claim 1. Again, however, this rejection does not address the new language added to Claim 1 in the September 5, 2006 Amendment. Also, paragraph 6 of the outstanding Office Action is substantially identical to paragraph 4 of the September 1, 2006 Office Action. Applicants submit that this is improper, and the cited reference to Arai et al. cannot meet the limitations of currently pending Claim 1. Therefore, the rejection based on Arai et al. should also be withdrawn.

For the reasons discussed above, Applicants' Claim 1 patentably defines over Benjamin et al., Lee et al. and Arai et al. The outstanding Office Action applies these references in combination with secondary references to reject the dependent claims in the current application. However, these rejections of the dependent claims suffer from the same deficiencies noted above. Thus, the remaining dependent claims in this case also patentably define over the cited references.

Finally, Applicants note that the outstanding Office Action once again applies the secondary reference to Strang et al. in rejecting Claims 13, 14, 16-18 and 20. However, as noted above, Applicants have already explained in the Amendment filed May 19, 2006 and the Amendment filed September 5, 2006 that the Strang et al. reference does not qualify as prior art under 35 U.S.C. §103(c). Applicants respectfully submit that any forthcoming Office Action should not apply the cited reference to Strang et al. in a 35 U.S.C. §103(a) rejection.

*For the reasons stated above, Applicants' claims patentably define over the cited references, and any future Office Action cannot be made Final in this case.*

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application and the present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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